## Message

From: Schneider, Shelley [shelley.schneider@nebraska.gov]

**Sent**: 5/24/2019 1:41:42 PM

To: Hamera, Donald [Hamera.Don@epa.gov]; Anderson, Reuel [reuel.anderson@nebraska.gov]

CC: Green, Jamie [Green.Jamie@epa.gov]

Subject: RE: Alt E

Thanks Don. I think that summarizes our discussion yesterday. To expand on the Risks of Volatization, there are two things. First, our Air Program has been in contact with RTP about whether any of the chemicals are not just pesticides, but also VOCs. The reason being is if they are VOCs, then they are regulated by the air program. Also, Air is concerned about whether the BioChar process would result in any of the pesticides to be emitted in the stack and/or left in the BioChar. It may be beneficial for EPA water & Chemical programs to work with the Air program on this. Second, AltEn would like to use evaporators in their lagoons. We know that the pesticides are in the lagoon water, so if they use evaporators, is there any risks to nearby populations, the workers on site, or any wildlife in the area. AltEn also irrigates out of the lagoons through center pivots. We have the same concerns/questions as with evaporators.

Feel free to call me or Reuel if you need any clarification.

Thanks! Have a great holiday.

Shelley Schneider, P.E. | Division Administrator – Water Permits Division | Nebraska Department of Environmental Quality

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From: Hamera, Donald <Hamera.Don@epa.gov>

Sent: Thursday, May 23, 2019 4:21 PM

To: Anderson, Reuel <reuel.anderson@nebraska.gov>; Schneider, Shelley <shelley.schneider@nebraska.gov>

Cc: Green, Jamie < Green. Jamie @epa.gov>

Subject: Alt E

Reuel, Shelley:

Here is a rough start (this needs some work) regarding Alt E risk concerns and pathways.

Water from settling lagoons being used to irrigate crop fields (center pivot). Risks associated with this practice. Runoff into nearby streams, uptake by crops utilized for human or animal consumption (anything else?).

Risks of Volatization (Reuel or Shelley can you expand on this?). Any of these pesticides considered VOCs?

Risks associated with direct human contact with the wet cake (skin absorption, inhalation). What is the critical pathway?

Concerns about about wildlife, domestic animals coming into contact (eating) wet cake.

Concerns about crops being grown on fields where wet cake solids have been land applied.

Concerns about nearby drinking water aquifers and levels of concern.

Please feel free to change, alter, add to make sure all of your questions/concerns are covered. Send back. Thanks

Regards Don

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